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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/362,041	07/28/1999	SEIICHI SAITOH	500.37414X00	6332

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EXAMINER

HUA, LY

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/362,041

Applicant(s)

SAITOH ET AL.

Examiner

Ly V. Hua

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.5</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- a. With regard to claims 9-13 and 15-19:
 - i. This claim is directed to a single mean (i.e., the interface circuit).

2164.08(a) Single Means Claim

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - b. With regard to claim 9:
 - i. It is not clear how a combination of the converting of an instruction into a transmission packet and the transmitting of the transmission packet to a bus accomplishes authentication performed by the interface circuit. Perhaps, this is because the role that the instruction play in the authentication is not clear.
 - ii. The phrase "authentication to ... apparatuses" appears to be not idiomatic in that it is not clear what is meant by "authentication to". Notice it is not clear as to the subject that does the authentication and it is not clear as to the object being authenticated.
 - iii. The prepositional phrase "via an asynchronous transmission processing circuit" makes it not clear as to whether the interface circuit or the asynchronous transmission processing circuit performs the authentication.

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- iv. The prepositional phrase “in a packet processing circuit” also makes it not clear as to whether the interface circuit or the packet processing circuit performs the authentication.
 - v. The prepositional phrase “by a bus control circuit” makes it not clear as to whether the interface circuit or the bus control circuit does the transmitting.
- c. With regard to claim 14:
- i. The phrase “one input terminals” is not idiomatic.
- d. With regard to claim 15:
- i. The clause “said ... circuit retrieves said ... bus” appears to be confusing since a bus cannot be retrieved especially by an interface circuit.
 - ii. What is that which is connected to the digital signal bus is not clear.
- e. With regard to claim 16:
- i. The recited transmitting of a digital video signal is of which component is not clear. Notice that it is not clear whether the “transmitting” (at line 3) is done by the apparatuses or by the interface circuit.
- f. With regard to claim 17:
- i. The recited transmitting of a digital video signal is of which component is not clear. Notice that it is not clear whether the “transmitting” (at line 3) is done by the apparatuses or by the interface circuit.
- g. With regard to claim 18:
- i. The antecedent to which the word “which” (at line 3) refers is not clear. With this problem with the word “which”, claim 18 does not further add limitation claim 9.
- h. With regard to claim 19:
- i. The antecedent to which the word “which” (at line 3) refers is not clear. With this problem with the word “which”, claim 19 does not further add limitation claim 9.

Claim Rejections - 35 USC § 103

4. ¶The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly

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owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al (6,519,701).

i. As per claims 9, 15, 16, 18 and 19:

i. Due to the problems under 35 USC 112, second paragraph, listed above, the claimed invention in claim 9 not clear and thus is hereby addressed with the following attempt.

(1) Kawamura et al (6,519,701 hereinafter Kawamura) teaches:

(a) an apparatus comprising:

(i) an interface [1394 (i.e., element 49, 36 or 26 in Fig. 2)],

1) which interface:

a) requests [under control of element 62 (col. 5, lines 27-42)]

i) authentication [which is inherently at predetermined timing since timing is critical in digital processing apparatuses] ;
and

b) transmits [responsive to an ID request (col. 5, lines 27-42)]

ii) a packet [i.e., the ID transmission]

iii) [which includes a transmission which enables authentication].

(2) However Kawamura does not explicitly teach:

(a) converting the object to be transmitted to a transmission packet.

(3) Official notice is hereby taken that:

(a) converting to-be-transmitted-object to a transmission packet for both encrypting as for security reason and for making the object suitable to certain other communication protocol is notoriously old and well known in the art.

(4) It would have been obvious to a person having ordinary skill in the art at the time the invention was made to realize that Kawamura's encryption of his ID is a form of conversion converting a to-be-transmitted-object.

j. As per claim 17:

i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to set an authenticating means to authenticate an entity that is to copy a protected material when the material is copy protected.

ii. The skilled person would have been motivated to do such setting because it is a common practice in the art to authenticate such entity before allowing the entity's copying of the material.

k. As per claims 10-14 and 17:

i. Official notice is hereby taken that it is notoriously old and well known in the art to trigger authentication when a to-be-authenticated element is turned on (or inserted into a system and thus detected).

ii. The matter of when an interface circuit is to do the authentication, [which authentication is recited in claim 1 and (thus addressed above)] is obvious predetermined timing that would have been obvious to a person having ordinary skill in the art.

6. The prior art of record of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly V. Hua whose telephone number is (703) 305-9684. The examiner can normally be reached on Monday to Friday, from 9:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Kim can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ly V. Hua
Primary Examiner
Art Unit 2135

Lvh
February 23, 2004